

Ikegami image

HDL-45E/E1



3CCD Multiple-purpose HDTV Camera System

- 2/3-inch 2.3 Megapixel AIT CCD
- 14-Bit A/D Conversion
- Low Noise Gain up
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Advanced Full Digital Processing ASIC
- Fully compatible with Unicam HD Product Range
- Light weight and compact
- ATW (Auto Tracking White balance) Function
- Digital Extender
- AVC (Auto Video Level Control) Function
- 23.95/24psF optionally available (HDL-45E1)

The HDL-45E/E1 is a 3CCD multi-purpose HDTV Camera achieving superb picture quality, high stability and excellent reliability with the incorporation of Ikegami's cutting edge digital technology. The Camera provides superior picture with newly developed 2/3-inch 2.3 Megapixel AIT CCD, digital processing LSI (ASIC) and the latest 14-bit A/D Converters. With its compact one-piece form, this Camera is suitable for various applications such as a weather camera, news flash camera, POV camera, etc. The HDL-45E1 adds support for the 1080/24psF and 1080/23.98psF formats.

RATINGS / PERFORMANCE

Image Sensor	2/3-inch, 2.3 Megapixel AIT CCD	
Scanning System	HDL-45E	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2
	HDL-45E1	1080i 50 / 59.94 YPbPr 4:2:2, 1080 psf 25 / 29.97 YPbPr 4:2:2, 1080p 24 / 23.98 YPbPr 4:2:2
Optical System	2/3-inch, RGB 3CCD, F1.4	
Sensitivity	F11 (1080/59.94i), F12 (1080/50i) typical at 2000lx	
S/N Ratio	56 dB (1080i)	
Limiting Resolution	1000 TV lines (1080i)	
ND Optical Filter Disc	100%, 25%, 6.2%, 1.6%	
Electrical Colour Compensation	3200K / 5600K selectable	
Electrical Gain	-6,-3, 0, +3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54 dB -6,-3, 0, +3,+6,+9,+12 dB for 1080 psf	
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000	
Accumulation	1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1s, 2s, 4s	
External Sync	SYNC 0.6V p-p ±6 dB 75Ω BNC CN 1 ch (BB / PS Signal)	
Output Signals (Digital)	HD-SDI × 2 ch (SMPTE 292 M, 75 BNC Connector, UP CN BOX type: 1 ch)	
Output Signals (Analog)	G,B,R / Y,Pb,Pr selectable 1 ch (Multi-pin Connector)	
Dimensions / Weight	W90 x H103 x D180 mm / approx. 1.7 kg	
Operating Temperature	-10 °C to +45 °C	
Relative Humidity	30% to 90% (non-condensing)	
Storage Temperature	-20 °C to +60 °C	
Operating Voltage	DC+11 to +16V	
Power Consumption	Approx. 22W	



Example of application

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

HDL-4500



Example of application

Super High Sensitivity 3CMOS HDTV Camera System

- Sensitivity: F22 / 2000 lux (S/N: 56 dB)
- Advanced Full Digital Processing LSI (ASIC)
- Built-in Servo Filter / ECC (Electronic Colour Compensation) Filter
- Colour Corrector + Custom Colour Effect
- Two HD-SDI Outputs
- Full Remote Control
- ATW (Auto Tracking White balance) Function
- Digital Extender
- Frame Accumulation
- Column Adding
- ENG Style Operation (Option)
- AVC (Auto Video Level Control) Function

The HDL-4500 is a three CMOS Camera, belonging to Ikegami's leading camera and digital technology, achieving super high sensitivity and a high quality picture. 1.3 Megapixel High-speed Multi-sampling type super high sensitivity CMOS Sensor allows sufficient sensitivity for shooting without using any lights even under moonlight conditions. With its compact one-piece form, the camera is suitable for various POV applications such as a traffic and weather camera, as well as a wide range of surveillance applications.

RATINGS / PERFORMANCE

Image Sensor	2/3-inch, 1.3 Megapixel CMOS
Scanning System	1080i 50 / 59.94 YPbPr 4:2:2
Optical System	2/3-inch, RGB 3CMOS, F1.4
Sensitivity	F22 or more at 2000 lx at 2000 lx
S/N Ratio	56 dB (1080i)
Limiting Resolution	700 TV lines (1080i)
ND Optical Filter Disc	100%, 25%, 6.2%, 1.6%
Electrical Colour Compensation	3200K / 5600K selectable
Electrical Gain	0 dB, -6 dB, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB, 54 dB, 60 dB, 66 dB, 72 dB, 78 dB
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
Gamma	OFF, 0.35, 0.40, 0.45
Minimum Illumination	0.001 lx (theoretical value) / F1.4 +78 dB [gain up, 100% video level]
Digital Extender	1.5X, 2X, 3X, 4X, 6X, 8X, 10X
External Sync	SYNC 0.6V p-p ±6 dB 75 Ω BNC CN 1ch (BB / PS Signal)
Output Signals (Digital)	HD-SDI × 2ch (SMPTE 292M, 75 BNC Connector, UP CN BOX type: 1ch)
Output Signals (Analog)	G,B,R / Y,Pb,Pr selectable 1ch (Multi-pin Connector)
Dimensions / Weight	W90 x H103 x D180 mm / approx. 1.8 kg
Operating Temperature	-10°C to +45°C
Relative Humidity	30% to 90% (non-condensing)
Storage Temperature	-20°C to +60°C
Operating Voltage	DC+11 to +16V
Power Consumption	18W or less

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

NEW HDL-57



One-Piece Full Digital Native Multi-Format HDTV Camera

- One-Piece Full Digital Native Multi-Format HDTV Camera
- 2.5 Megapixel CMOS Sensor
- HDTV Native Multi-Format Capability
- Lower noise with Gain-up
- Fully Digitized Circuits
- Servo Filter
- ND Filter and Electric Color Filter

Advanced new CMOS Sensors are employed to achieve superb picture quality. CMOS Sensors have wide dynamic range and, in principle, no smear. The sensors include significant circuitry within the sensor itself, resulting in a digital video interface between sensor and Ikegami camera DSP, all in a very small device with low power consumption. The CMOS Sensor includes native progressive and interlace modes for multi-format HD operation.

RATINGS/PERFORMANCE

Image Sensor	2/3-inch, 2.5 Megapixel CMOS
Scanning System	1080i / 59.94 YPbPr 4:2:2 720p / 59.94 YPbPr 4:2:2 1080i / 50 YPbPr 4:2:2 (Option) 720p / 50 YPbPr 4:2:2 (Option) 1080p / 23.98 (Option) 1080p / 23.98 sf (Option)
Optical System	2/3-inch, RGB 3CMOS, f1.4
Sensitivity	F11 (1080/59.94i), F12 (1080/50i) typical at 2000 lx
S/N Ratio	60 dB (1080i)
Limiting Resolution	1000 TV lines for 1080i Format, 700 TV lines for 720p Format (1080i)
ND Optical Filter Disc	100%, 25%, 6.2%, 1.6%
Electrical Colour Compensation	3200K / 5600K selectable
Electrical Gain	0dB, +6dB, +12dB, +18dB, +24dB, +30dB
Electrical Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
External Sync	SYNC 0.6V p-p ±6dB 75Ω BNC CN 1ch (BB / PS Signal)
Output Signals (Digital)	2ch HD-SDI
Output Signals (Analog)	G, B, R / Y, Pb, Pr selectable 1ch (Multi-pin Connector)
Dimensions / Weight	W90 x H103 x D180 mm / approx. 1.5 kg
Operating Temperature	-10°C to +45°C
Relative Humidity	30% to 90% (non-condensing)
Storage Temperature	-20°C to +60°C
Operating Voltage	DC+11 to +16V
Power Consumption	22W or less



Example of application

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A

HDL-F30/F31



3CCD Multi-purpose HDTV Camera System

- Shallow design ideal for gyro heads
- AIT CCD
- +54 dB Gain UP
- Column Adding
- Frame Accumulation
- Minimum Illumination of 0.00027 lx
- Digital Extender
- Multi-Format
- 3D video capable
- AVC (Auto Video-level Control) Function

The HDL-F30 is a top-of-the-line multi-purpose compact 3CCD HDTV Camera equipped with high resolution 2.3 Megapixel AIT sensor. The HDL-F30 offers super high sensitivity, starting with F10 sensitivity sensor, and offering +54dB gain up, Column Adding, and Frame Accumulation functions. The super high sensitivity combined with a Digital Extender feature make the HDL-F30 ideal for airborne gyro stabilized ENG and law enforcement use. Also the Horizontal Reverse and Line Delay features will support 3D video production.

RATINGS / PERFORMANCE

Ratings	Scanning System		1080/59.94 i, 1080/50 i, 1080/29.97 psF, 1080/25 psF (1080/24 psF 1080/23.98 psF Supported by HDL-F31)
	Image Sensor		2/3-inch, 2.3 Megapixel, AIT CCD
	Effective Pixels		1920 (H) x 1080 (V)
	Lens Mount		BTA S-1005 B
	Optical Filter		PS
	(W/Full Servo)		PS
	Electronic Colour Compensation		3200K/5600K selectable
	Sampling Frequency		74.1758 MHz or 74.25 MHz
	Quantization		14-Bit
	Power Requirement		+11 VDC to +16 VDC (up to 15 m Camera Cable)
Operating Temperature		Head -20°C to +45°C / CCU -10°C to +45°C	
Storage Temperature		Head -30°C to +60°C / CCU -20°C to +60°C	
Dimensions		Head W 100 x H 123 x D 80 mm / CCU W 120 x H 105 x D 180 mm	
Weight		Head 1.0 kg approx. / CCU 1.5 kg approx.	
Performance	S/N Ratio		-60 dB or more (1080/50i)
	Modulation Depth		40% or more at 800 TVL, 27.5 MHz (1080 i)
	Limiting Resolution		1000 TV lines
	GAIN	1080i Format	-6,-3, 0,+3,+6,+9,+12,+18,+24,+30,+36,+42,+48,+54 dB, (1080 psF: Max +12 dB)
	GAMMA		OFF, 0.35, 0.40, 0.45
	Electronic Shutter		1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000
	Frame Accumulation		1/15, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, 1, 2 (sec.)
	Digital Extender		1.5X, 2X, 3X, 4X
	Power Consumption		25W approx.
	Output Signals		HD-SDI (SMPTE292M) 2 ch Analog Video R, G, B/Y, Pb/Pr selectable (Multi-pin Connector)
Input Signal External Sync		SYNC 0.6 Vp-p ±6 dB 75 Ω BNC CN 1 ch (BB/PS Signal)	



Example of application

RELATED ITEMS:
OCP-300/100/10 | RM-51A

HDL-23

Ultra Compact 3G HDTV 3CMOS Camera System

- 1/3-inch Progressive 3CMOS Sensor
- Multiple Output Interfaces
- Multi-Format Support
- 3G 1080P50 capable
- Compact & small
- Camera Head Size: W34xH40xD40mm
- Auto Video Level Control
- Column Adding
- Broadcast Remote Control Protocol
- IP Encoder Output (Option)
- Adjustable Scene Files

The HDL-23 is a subminiature HDTV Camera with progressive 3CMOS Sensor, providing native 1080p/50 HDTV picture with superb colour reproduction.

RATINGS / PERFORMANCE

Scanning System	1920 x 1080 progressive
Optical System	1/3-inch 3CMOS Sensor
Lens Mount	C-Mount
Power Requirement	+12VDC
Power Consumption	Approx. 20W
Remote Control	Ikegami standard OCPs (OCP-200/OCP-100/RM-51A)
Ambient Temperature	0°C to +40°C
Max. Cable Length	15 m (standard: 5 m)
Dimensions	Head: W34 x H40 x D40 mm approx. CCU: W170 x H58 x D200 mm approx.
Weight	Head: Less than 0.1 kg CCU: Less than 3 kg
Performance	
Sensitivity	F10 at 2000lx, 3200K
SNR	54 dB
Limiting Resolution	1000 TVL
Output Signals	
HD-SDI	1080i/50Hz, 59.94Hz 0.8Vp-p / 75 Ω x 2 ch
DVI	1920x1080p/50Hz, 59.94 Hz x 1 ch
HDMI (Option)	1920x1080p/50Hz, 59.94 Hz x 1 ch
SD-VBS	1.0Vp-p / 75 Ω x 1 ch
SD-Y/C	Y : VS1.0Vp-p / 75 Ω x 1 ch C : 0.286Vp-p / 75 Ω
IP Stream Output (Option)	
Network Mode	10 Base-T or 100 Base-TX
Motion Picture (H.264) Profile	Data rate: 512 k - 12 Mbps Frame rate: 25/ 12/ 8/ 5/ 3/ 2/1 fps
Still Picture (JPEG)	1920 x 1080 or 1280 x 720 pixels



Example of application

RELATED ITEMS:

BSH-300 | OCP-300/100/10 | RM-51A